JC17 Rec'd PCT/PTO 24 APR 2001 *P.S.H.*

105

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

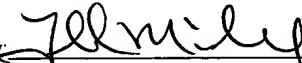
Applicant: ALARD  
Serial No.: 09/673,114  
Filed: October 10, 2000  
Notice of Allow. Date: n/a  
Due Date: Unknown  
Title: CELLULAR, RADIO SIGNAL WITH ADDITIONAL CHANNEL ASSIGNED...

RECEIVED

MAY 08 2001

Technology Center 2600

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described herein, are being deposited in the United States Postal Service, as first class mail, with sufficient postage, in an envelope addressed to: BOX MISSING REQUIREMENTS, Assistant Commissioner for Patents, Washington, D.C. 20231, on April 17, 2001.

By:   
Todd Michel

BOX MISSING REQUIREMENTS  
Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

We are transmitting herewith the attached:

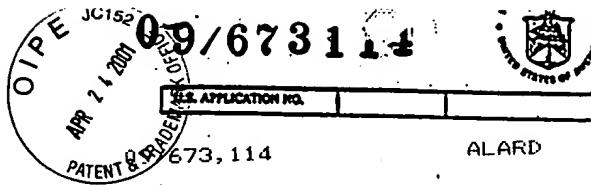
- Transmittal Sheet in duplicate containing Certificate of Mailing
- Signed Combined Declaration and Power of Attorney
- Check in the amount of \$130.00 for missing requirements completion fee
- Other: Communication re: Submission of Missing Requirements; Notification of Acceptance; Communication re: Request for Corrected Filing Receipt; Copy of Filing Receipt; Translation of International Preliminary Examination Report
- Return postcard

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers, if appropriate. Please charge any additional fees or credit overpayment to Deposit Account No. 13-2725. A duplicate of this sheet is enclosed.

MERCHANT & GOULD P.C.  
P.O. Box 2903, Minneapolis, MN 55402-0903  
612.332.5300

By:   
Name: John J. Gresens  
Reg. No.: 33,112  
JJG/tvm





Address: ASSISTANT COMMISSIONER FOR PATENTS  
Washington, D.C. 20231

JJ6

U.S. APPLICATION NO.

FIRST NAMED APPLICANT

ATTY. DOCKET NO.

M

9320-1422HWD

ALARD

5071

JOHN J GRESSENS  
MERCHANT & GOULD  
PO BOX 2903  
MINNEAPOLIS MN 55402-0903

INTERNATIONAL APPLICATION NO.

PCT/FR99/00849

I.A. FILING DATE

PRIORITY DATE

04/12/99 04/10/98

DATE MAILED: 11/20/00

**NOTIFICATION OF ACCEPTANCE OF APPLICATION UNDER 35 U.S.C. 371  
AND 37 CFR 1.494 OR 1.495**

1. The applicant is hereby advised that the United States Patent and Trademark Office in its capacity as  a Designated Office (37 CFR 1.494),  an Elected Office (37 CFR 1.495), has determined that the above identified international application has met the requirements of 35 U.S.C. 371, and is ACCEPTED for national patentability examination in the United States Patent and Trademark Office.
2. The United States Application Number assigned to the application is shown above and the relevant dates are:

10 OCT 00  
35 U.S.C. 102(e) DATE

10 OCT 00  
DATE OF RECEIPT OF  
35 U.S.C. 371 REQUIREMENTS

A Filing Receipt (PTO-103X) will be issued for the present application in due course. THE DATE APPEARING ON THE FILING RECEIPT AS THE "FILING DATE" IS THE DATE ON WHICH THE LAST OF THE 35 U.S.C. 371(C) REQUIREMENTS HAS BEEN RECEIVED IN THE OFFICE. THIS DATE IS SHOWN ABOVE. The filing date of the above identified application is the international filing date of the international application (Article 11(3) and 35 U.S.C. 363). Once the Filing Receipt has been received, send all correspondence to the Group Art Unit designated thereon.

3.  A request for immediate examination under 35 U.S.C. 371(f) was received on 10 OCT 00 and the application will be examined in turn.
4. The following items have been received:
  - U.S. Basic National Fee.
  - Copy of the international application in:
    - a non-English language.
    - English.
  - Translation of the international application into English.
  - Oath or Declaration of Inventor(s) for DO/EO/US.
  - Copy of Article 19 amendments.  Translation of Article 19 amendments into English.  
The Article 19 amendments  have  have not been entered.
  - The International Preliminary Examination Report in English and its Annexes, if any.
  - Copy of the Annexes to the International Preliminary Examination Report (IPER).
  - Translation of Annexes to the IPER into English.  
The Annexes  have  have not been entered.
  - Preliminary amendment(s) filed 10 OCT 00 and \_\_\_\_\_.
  - Information Disclosure Statement(s) filed 10 OCT 00 and \_\_\_\_\_.
  - Assignment document.
  - Power of Attorney and/or Change of Address.
  - Substitute specification filed \_\_\_\_\_.
  - Statement Claiming Small Entity Status.
  - Priority Document.
  - Copy of the International Search Report  and copies of the references cited therein.
  - Other:

Applicant is reminded that any communication to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above. (37 CFR 1.5)

Kaya Baltimore

National Stage Program

Telephone: (703) 733-3053

D✓



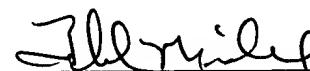
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: ALARD      Examiner: Unknown  
Serial No.: 09/673,114      Group Art Unit: 2642  
Filed: October 10, 2000      Docket No.: 9320.112USWO  
Title: CELLULAR, RADIO SIGNAL WITH ADDITIONAL CHANNEL...

PATENT RECEIVED  
MAY 08 2001  
Technology Center 2600

CERTIFICATE UNDER 37 CFR 1.8:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on April 17, 2001.

  
Todd Michel

SUBMISSION OF MISSING REQUIREMENTS

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Applicant respectfully brings to the PTO's attention the attached Notification of Acceptance dated November 20, 2000. Please note that the formal papers were not filed with the application filed on October 10, 2000 and therefore, in connection with the above-identified application, enclosed please find the originally signed Combined Declaration and Power of Attorney. Also enclosed is our check in the amount of \$130.00 to cover the Missing Requirements completion fee. We have not received the Notification of Missing Requirements and therefore do not enclose a copy thereof herewith.

04/30/2001 LLANDGRA 00000090 09673114

01 FC:154

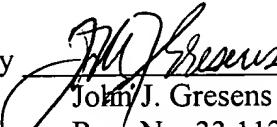
130.00 OP

Respectfully submitted,

MERCHANT & GOULD P.C.  
P.O. Box 2903  
Minneapolis, Minnesota 55402-0903  
(612) 332-5300

Dated: April 17, 2001

JJG/tvm

By   
John J. Gresens  
Reg. No. 33,112



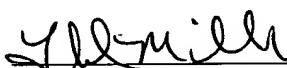
HJL  
PATENT RECEIVED  
MAY 08 2001  
Technology Center 2600

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: ALARD      Examiner: Unknown  
Serial No.: 09/673,114      Group Art Unit: 2642  
Filed: October 10, 2000      Docket No.: 9320.112USWO  
Title: CELLULAR, RADIO SIGNAL WITH ADDITIONAL CHANNEL...

CERTIFICATE UNDER 37 CFR 1.8:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on April 17, 2001.

  
Todd Michel

REQUEST FOR CORRECTED FILING RECEIPT

Office of Initial Patent Examination's Customer Service Center  
Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Enclosed is a photocopy of the filing receipt from the United States Patent and Trademark Office in the above-identified application showing requested corrections marked in red.

The total claims and Priority date is incorrect.

Please replace "20" with --21--.

Please replace "04/04/1998" from the Foreign Applications section with --04/10/1998--.

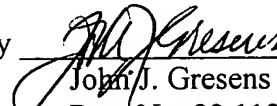
Correction of the records of the United States Patent and Trademark Office and issuance of a corrected filing receipt are respectfully solicited.

Respectfully submitted,

MERCHANT & GOULD P.C.  
P.O. Box 2903  
Minneapolis, Minnesota 55402-0903  
(612) 332-5300

Dated: April 17, 2001

JJG/tvm

By   
John J. Gressens  
Reg. No. 33,112

**LICENSE FOR FOREIGN FILING UNDER  
Title 35, United States Code, Section 184  
Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 36 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15 (b).

**PLEASE NOTE the following information about the Filing Receipt:**

- The articles such as "a," "an" and "the" are not included as the first words in the title of an application. They are considered to be unnecessary to the understanding of the title.
- The words "new," "improved," "improvements in" or "relating to" are not included as first words in the title of an application because a patent application, by nature, is a new idea or improvement.
- The title may be truncated if it consists of more than 600 characters (letters and spaces combined).
- The docket number allows a maximum of 25 characters.
- If your application was submitted under 37 CFR 1.10, your filing date should be the "date in" found on the Express Mail label. If there is a discrepancy, you should submit a request for a corrected Filing Receipt along with a copy of the Express Mail label showing the "date in."
- The title is recorded in sentence case.

Any corrections that may need to be done to your Filing Receipt should be directed to:

Assistant Commissioner for Patents  
Office of Initial Patent Examination  
Customer Service Center  
Washington, DC 20231



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MAY 08 2001  
Technology Center 2600

Page 1 of 3

## UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
www.uspto.gov

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/673,114	10/10/2000	2642	1038	9320.112USWO	✓ 3	20	5

JJ6  
23552  
MERCHANT & GOULD  
P O BOX 2903  
MINNEAPOLIS, MN 55402-0903

FILING RECEIPT -- 21 --



\*OC000000005569332\*

Date Mailed: 11/21/2000

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the PTO processes the reply to the Notice, the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Michel Alard, Paris, FRANCE;

## Continuing Data as Claimed by Applicant

THIS APPLICATION IS A 371 OF PCT/FR99/00849 04/12/1999

## Foreign Applications

FRANCE 98 04883 [04/04/1998] -- 04/10/1998 --

If Required, Foreign Filing License Granted 11/20/2000

## Title

Cellular, radio signal with additional channel assigned to downlink, corresponding method, system and base station

## Preliminary Class

379

Data entry by : ORDENEZ, MARTA

Team : OIPE

Date: 11/21/2000





## UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
 UNITED STATES PATENT AND TRADEMARK OFFICE  
 WASHINGTON, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)



Bib Data Sheet

SERIAL NUMBER 09/673,114	FILING DATE 10/10/2000 RULE -	CLASS 379	GROUP ART UNIT 2642	ATTORNEY DOCKET NO. 9320.112USWO
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**APPLICANTS**

Michel Alard, Paris, FRANCE;

**\*\* CONTINUING DATA \*\*\*\*\***

THIS APPLICATION IS A 371 OF PCT/FR99/00849 04/12/1999

**\*\* FOREIGN APPLICATIONS \*\*\*\*\***

FRANCE 98 04883 04/04/1998

**IF REQUIRED, FOREIGN FILING LICENSE**

GRANTED \*\* 11/20/2000

Foreign Priority claimed	<input type="checkbox"/> yes <input type="checkbox"/> no	STATE OR COUNTRY	SHEETS DRAWING	TOTAL CLAIMS	INDEPENDENT CLAIMS
35 USC 119 (a-d) conditions met	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after Allowance	FRANCE	3	20	5
Verified and Acknowledged	Examiner's Signature _____ Initials _____				

**ADDRESS**

23552

**TITLE**

Cellular, radio signal with additional channel assigned to downlink, corresponding method, system and base station

FILING FEE RECEIVED 1038	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:	<input type="checkbox"/> All Fees
		<input type="checkbox"/> 1.16 Fees ( Filing )
		<input type="checkbox"/> 1.17 Fees ( Processing Ext. of time )
		<input type="checkbox"/> 1.18 Fees ( Issue )
		<input type="checkbox"/> Other _____
		<input type="checkbox"/> Credit



# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 4787.WO	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/FR99/00849	International filing date ( <i>day/month/year</i> ) 12 April 1999 (12.04.99)	Priority date ( <i>day/month/year</i> ) 10 April 1998 (10.04.98)
International Patent Classification (IPC) or national classification and IPC H04L 5/02		
Applicant	WAVECOM	

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 9 sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 27 October 1999 (27.10.99)	Date of completion of this report 27 June 2000 (27.06.2000)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

**I. Basis of the report**

1. This report has been drawn on the basis of (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

the international application as originally filed.

the description, pages 2-4, 6, 7, 9, 12-14, as originally filed,  
pages \_\_\_\_\_, filed with the demand,  
pages 1, 5, 8, 10, 11, filed with the letter of 17 April 2000 (17.04.2000),  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

the claims, Nos. \_\_\_\_\_, as originally filed,  
Nos. \_\_\_\_\_, as amended under Article 19,  
Nos. \_\_\_\_\_, filed with the demand,  
Nos. 1-21, filed with the letter of 17 April 2000 (17.04.2000),  
Nos. \_\_\_\_\_, filed with the letter of \_\_\_\_\_

the drawings, sheets/fig 1/3-3/3, as originally filed,  
sheets/fig \_\_\_\_\_, filed with the demand,  
sheets/fig \_\_\_\_\_, filed with the letter of \_\_\_\_\_,  
sheets/fig \_\_\_\_\_, filed with the letter of \_\_\_\_\_

2. The amendments have resulted in the cancellation of:

the description, pages \_\_\_\_\_

the claims, Nos. \_\_\_\_\_

the drawings, sheets/fig \_\_\_\_\_

3.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

4. Additional observations, if necessary:

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/FR 99/00849**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims	1-21	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-21	NO
Industrial applicability (IA)	Claims	1-21	YES
	Claims		NO

**2. Citations and explanations**

Reference is made to the following documents:

D1: WO-A-98 02982  
D2: EP-A-0 786 890  
D3: FR-A-2 733 869

**Claim 1:**

Document D1 describes (see the passages cited in the search report) a method for transmitting a cellular radio telephony signal ("GMS system for mobile telephony") using a main bi-directional symmetric channel ("GMS primary band", figure 2), including a main uplink ("Uplink, mobile to base", figure 2) and a main downlink ("Downlink, base to mobile", figure 2), ensuring particularly a low or medium transmission rate of data (page 8, lines 7-9) and signalling and control information ("signalling channels provided for speech"), and also using at least one additional channel ensuring particularly high-rate data transmission ("wideband data transmission takes place in a further area of the spectrum, identified as a wideband extension").

The only difference between the subject matter of claim 1 (to the extent that said claim can be understood, see Box VIII of the present report) and the subject matter described in D1 is the allocation of the additional channel **only in the downlink direction**. However, the asymmetrical allocation of a wideband resource, particularly for high data transmission rate, was already widely known in the field of telecommunications (ex. ADSL, modems, etc...) to persons skilled in the art at the priority date of the present application (10/04/98). Simply using this known principle in a cellular radio telephony system using an additional wideband resource, as described in D1, therefore does not involve an inventive step.

**Dependent claims 2 through 13** do not appear to contain any features which, in combination with the features of claim 1 to which they refer, might define subject matter that meets the PCT requirements of inventive step, given that they are already disclosed in or easily derivable, for a person skilled in the art, from documents D1 through D3.

- claim 2: see D1, page 8, lines 19-32;
- claim 3: see D1, claim 8;
- claim 4: see D1, claims 4 and 13;
- claims 5 through 7: derivable from D1;
- claim 8: see D2;
- claim 9: see D1, claim 9;
- claims 10 through 13: see D3

**Claim 14** contains the same features as claim 1, but is expressed in terms of a system rather than a

method. It therefore does not meet the requirements of PCT Article 33(3) either.

**Claim 15** relates to subject matter identical to that of claim 1 (see Box VIII of the present report) and therefore does not meet the requirements of PCT Article 33(3).

**Claim 16** relates to a mobile unit for the method according to claim 15. The features of such a mobile unit are suggested in document D1. Claim 16 therefore does not meet the requirements of PCT Article 33(3).

**Dependent claims 17 through 19** do not appear to contain any features which, in combination with the features of claim 16 to which they refer, might define subject matter that meets the PCT requirements of inventive step, since they are easily derivable, for a person skilled in the art, from document D1.

**Claim 20** relates to a base station for the method according to claim 15. The features of such a station are suggested in document D1. Claim 20 therefore does not meet the requirements of PCT Article 33(3).

**Dependent claim 21** contains the feature wherein the base station is designed to transmit the signalling related to the additional channel, which is described in D1.

**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

International application No.

PCT/FR 99/00849

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claim 1 relates to a "signal structure" and is therefore considered a "signal" type claim. It should therefore contain technical features relating to a "signal", i.e., spectral or time features of a physical quantity enabling information to be represented. However, the signal features disclosed in claim 1 are a main channel and an additional channel. The term "channel" generally means a physical medium in telecommunications (for example a frequency band, a time slot of a time frame,...), for transmitting signals. A signal is transmitted in a channel but cannot contain the channel itself. Claim 1 is therefore unclear (PCT Article 6).